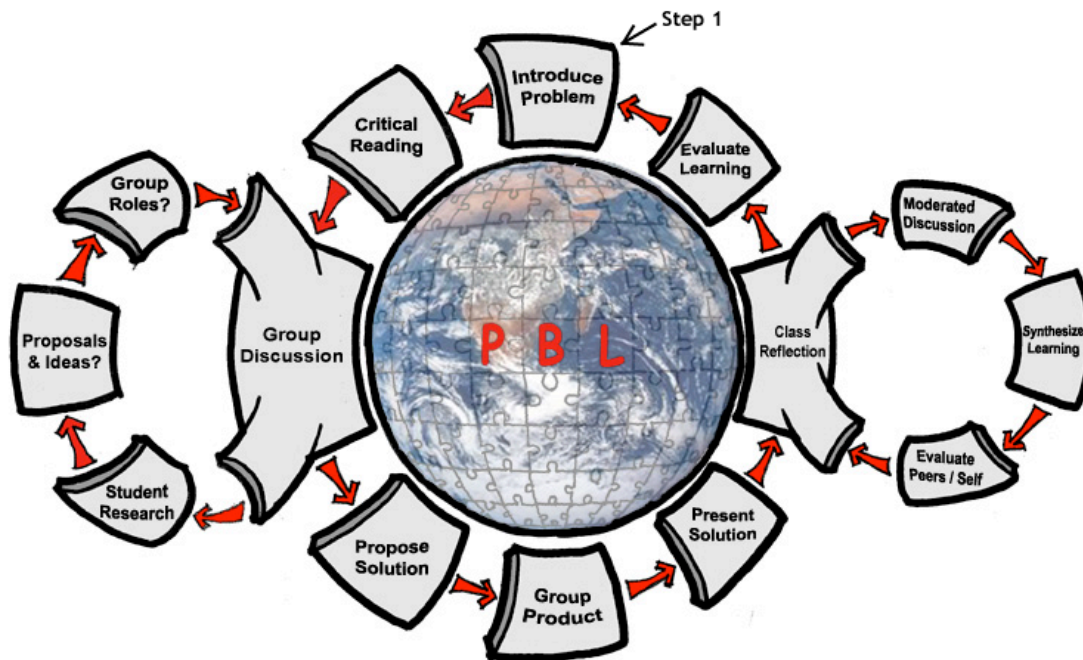


Problem-Based Learning



Source: Center for Teaching Excellence; Virginia Commonwealth University
http://www.vcu.edu/cte/resources/nfmg/11_07_problem_based_learning.htm

This pattern concentrates on offering an instructional approach to motivate learners to engage in developing skills required for independent learning and development of communication. It is a way of helping to implement the patterns of COLLABORATIVE LEARNING.



The fundamental challenge to achieving positive learning outcomes and knowledge transfer via collaborative learning is the learning and teaching approach. It is not easy to structure and manage collaborative learning activities due to the diversity of learners having different learning experiences, prior knowledge, and backgrounds. Often instructors and learners give up collaborative activities because the tasks lack focus, result in unequal participation, leading to unfair contribution and so on.

Generally, the failure of conventional learning and teaching models which involve learners in the learning process has been closely associated with the inability to allow the learners to engage in a continuing acquisition of knowledge and understanding. The continuing acquisition of knowledge requires students to be active participants in a community of learners.

In a conventional context, the objective of learning design developed in a linear fashion is drilling the technical knowledge. However, Problem-Based Learning (PBL) approach of collaborative-focused learning design provides the opportunity for

students to maximize their own and each other's learning experiences. PBL is carefully structured collaborative learning model ensures that learners are actively involved in constructing their own knowledge while at the same time encouraging each other to achieve their learning goals.

PBL is an instructional approach to help motivate learners to engage in authentic problem solving task. Effective PBL begins with problems that can sustain learners' interest and motivate them to probe for deeper understanding of the concepts being introduced. One of the aims of PBL is the development of self-directed learning (SDL) skills. In Loyens, Magda & Rikers' discussion (2008), SDL is defined as "a process in which individuals take the initiative...in diagnosing their learning needs, formulating goals, identifying human and material resources, choosing and implementing appropriate learning strategies, and evaluating learning outcomes." In PBL approach, learners actively involve in the learning process, and also take responsibility for their learning, which leads to and increase in self-directed learning skills. Severiens and Schmidt (2009) found that PBL and its focus on SDL led to motivation for learners to maintain study pace, led to social and academic integration, encouraged development of cognitive skills, and fostered more study progress than students in a conventional learning setting.

Therefore:

Conducting a PBL activity always begins with identifying a problem to the learners. The problem is central to the learning process and has to be carefully planned and defined ahead of presenting to the learners. Dynamic learning activities such as researching, reading, discussing, debating and negotiating will be utilized for generating appropriate solutions for addressing the problem. Learners will propose the solutions for reflection and feedback purposes. Moderators will evaluate the activities during the learning process to conclude PBL. Teachers should facilitate the entire learning process to make sure the learners are on track.



Patterns needed to complete this pattern include MODERATOR/FACILITATOR, RESEARCH, PRESENTATION, and EVALUATION.



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